



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

ARTICLE XVIII.

Of Sassarubrin, a Resin evolved by Sulphuric Acid from Oil of Sassafras, which is remarkable for its efficacy in Reddening that Acid in its concentrated state. By R. Hare, M. D., &c., &c., &c.

THIS colour is due to a peculiar resin, which I would call sassarubrin, being elaborated from the oil of sassafras, by its reaction with sulphuric acid, with phenomena which are striking, and, in some respects, singular. If a mixture be made of equal parts of the oil of sassafras, alcohol and sulphuric acid, on raising the temperature to a certain point, the whole mass rises up in a resinous foam, of a beautiful colour, between copper and purple, with a metallic brilliancy. In some instances, it has been partially forced out of the retort through the beak in a cylindrical mass, which acquired, on cooling, the consistency of pitch. This pitchy substance is a compound of the resin above alluded to and sulphuric acid, with which it forms a soluble substance, neutralising its sourness to a certain extent. By steeping this subacid compound in ammonia, straining, washing the residue with water, and desiccation, a brittle tasteless resin remains, which is quite insoluble in water, but very soluble in alcohol and hydric ether.

The addition of this sassarubrin to concentrated sulphuric acid, produces the crimson colour already mentioned as resulting from the presence in that liquid of a minute portion of oil of sassafras. I infer that the colour is due to the evolution of sassarubrin, which has a

bassic affinity for the acid, to which it owes its birth. The ethereal and alcoholic solutions of sassarubrin are of the colour of a dingy white wine, but acquire a deep crimson when mingled with concentrated sulphuric acid.

Sassarubrin may be produced by the union of the acid and oil, provided it be moderated by refrigeration or dilution with water.

Without some precaution, the heat produced is sufficient to char the resin more or less. The reddening influence of the oils of cinnamon and cloves is due to the generation of resins analogous to sassarubrin.

To those resins the names of cinnarubrin and clovorubrin may be severally assigned. Cinnarubrin may be evolved by adding oil of cinnamon to equal parts of sulphuric acid and water, previously mixed and refrigerated, the temperature being subsequently elevated till the mass rises up in a foam; when the whole should be poured into a solution of pearlash, from which the resin may be extricated by a strainer. It is analogous to sassarubrin, but is less efficacious in colouring sulphuric acid, and does not, like the former, impart to the sides of the containing glass a rich red colour. Moreover, it appears to be partially insoluble in alcohol, and to retain sulphuric acid after being boiled with an alkaline solution.

I infer that a new series of resins may be evolved from the essential oils by their reaction with sulphuric acid; which, having a general analogy to each other, may still have discriminating characteristics, arising from the oils whence they may be derived.